

**Compositions and Methods for Differentiating Among
Shigella Species and *Shigella* from *E. coli* Species**

Abstract of the Disclosure

5 The present invention relates to detecting and distinguishing among bacteria that belong
to the species *Shigella*, including *Shigella boydii*, *Shigella dysenteriae*, *Shigella flexneri*, and
Shigella sonnei; and detecting and distinguishing *Shigella* bacteria from *Escherichia coli*. In
particular, the invention includes provision of species-identifying and genus-identifying
nucleotides of 16s rRNA or 16s rDNA from the above named species. Nucleic acid probe
10 molecules capable of differentiating among these species and genera by hybridization, along with
methods for their use for specific detection in clinical samples, food samples, environmental
samples, and the like are also provided.